

Letters to editor 15/5/2013

CO₂ reaching milestone in the atmosphere

The New York Times article with the headline 'CO₂ level passes grim milestone' appearing in the Sunday Post on May 12th is misleading. It is in fact a timely reminder to question whether CO₂ produced by human activities is mainly responsible for global warming.

The New York Times article stated that greenhouse gases also include methane and nitrous oxide, but CO₂ is considered by far the biggest factor. This is incorrect because the most important greenhouse gas water vapour is completely ignored.

A climate change statement based on consensus opinions of top British scientists was published in September 2010 by the Royal Society three years after the assessment report no. 4 of the Intergovernmental Panel on Climate Change in 2007. In it is stated that, in addition to clouds, the two gases making the largest contributions to the greenhouse effect are water vapour, followed by CO₂. Smaller contributions are made by other gases including ozone, methane, nitrous oxide and human-made gases such as chlorofluorocarbons. The conclusions drawn are supported by measurements from the surface, research aircraft and satellites, together with laboratory observations and calculations.

A study of the warming power of CO₂ and water vapour by Paolo Saores in 2010 concluded that, unlike CO₂, water vapour in the atmosphere is rising in tune with monthly temperature changes.

After the 9-11 terrorist attacks, the cessation of all commercial flights over North America for 3 days have led to the increase of diurnal temperatures measured over the continent by up to 3 degrees Celsius. This is attributed to the disappearance of contrails produced by jet engines which are mainly composed on water vapour.

For tackling global warming, the reduction of heat generation and the predominant atmospheric greenhouse gas water vapour is therefore much more effective than reducing CO₂ levels.

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